Q/ After selling 25 items, the profit is equal to the sp of 5 items. Then find the profit %age ?

Ans $\frac{5}{25-5} \times 100 = 25\%$

Let, sp of 1 item is = 1
" " 25 items = 25
" " 5 item = 5

Cost price = 25 − 5 = 20

Profit %age = $\frac{5}{20} \times 100 = 25\%$

Q/ A person bought 20 tables in ₹1200 & sold out of them. His profit is equal to the s.p. of the 4 tables. Find sp. of each table?

Sol^n

CP of 20 table = 1200

CP of 1 table = $\frac{1200}{20} = 60$

profit %age = $\frac{4}{20-4} \times 100 = \frac{4}{16} \times 100 = 25\%$

So S.P. = C.P $\left(\frac{100 + P\%}{100}\right)$

$= 60 \times \frac{125}{100} = 25 = 75$

Q/ After selling 'x' items, profit/loss is equal to the C.P. of y items then profit/loss %age

$= \frac{y}{x} \times 100$

Q/ After selling 30 items, the profit is equal to the CP of 6 items. Then find profit %age ?

Ans $\frac{6}{30} \times 100 = 20$

Error % age / profit % age $= \frac{\text{Error}}{\text{True value} - \text{error}} \times 100$

Q/ A shopkeeper promises to sell his items at C.P. But he weights 100 gm less per 1 kg. Find his profit % age.

Sol $\frac{100}{1000-100} \times 100$ (1 kg = 1000 gm)

$= \frac{100}{900} \times 100 = = \frac{100}{9} = 11.11\%$

Q/ A shopkeeper sells his items at the C.P., but he earns 12.5% profit by weighing some less amount. Find the loss amount per kg.

$\frac{12.5}{100} = \frac{x}{1000-x} \Rightarrow 100x = 12.5(1000-x) \Rightarrow x = \frac{1250}{112.5} = \frac{1250}{0.5}$

$\Rightarrow x = 111.11$ g